IN THE CLAIMS:

Kindly add new claims 21-25 and cancel claims 7, 8 and 16-20 without prejudice or admission as shown in the following listing of claims, which replaces all previous versions and listings of claims in this application.

1. (previously presented) A method of fabricating a three-dimensional microstructure, comprising the steps of:

forming a prototypic structure in accordance with data corresponding to a designed three-dimensional shape of the three-dimensional microstructure by scanning a sample with a beam produced by a charged-particle beam system while controlling processing conditions thereof;

comparing the shape of the formed prototypic structure with the designed three-dimensional shape of the three-dimensional microstructure to identify differences between the shape of the prototypic structure and the designed three-dimensional shape of the three-dimensional microstructure; and

processing the prototypic structure to correct the differences identified in the comparing step by scanning the prototypic structure with a beam produced by the charged-particle beam system while adjusting the processing conditions thereof to thereby fabricate a three-dimensional microstructure having a shape corresponding substantially to the designed three-dimensional shape.

2. (previously presented) A method of fabricating a three-dimensional microstructure as set forth in claim 1; wherein the processing conditions of the charged-particle beam system include accelerating voltage, beam current, scan rate, dot-to-dot interval, and dot duration.

3. (previously presented) A method of fabricating a three-dimensional microstructure as set forth in claim 1; wherein the step of adjusting the processing conditions comprises the steps of obtaining characteristic data indicating a relation between processed area and deposition rate corresponding to a current of the beam and adjustably increasing the duration of the beam scans by a value corresponding to the ratio (decrease in rate value)/(maximum rate value) in accordance with a decrease in the deposition rate.

4. (previously presented) A method of fabricating a three-dimensional microstructure as set forth in claim 1; wherein the step of adjusting the processing conditions comprises the steps of obtaining characteristic data corresponding to a relation between processed area and deposition rate for each value of a current of the beam, processing the prototypic structure by using a maximum rate region up to a kink portion of one of the beam current values, switching the beam current to a next greatest value in the kink portion and using the maximum rate region up to a kink

portion of the beam current with the next greatest value, and repeating the switching step until the differences obtained from the comparing step are corrected.

5. (previously presented) A method of fabricating a three-dimensional microstructure as set forth in claim 2; wherein the step of adjusting the processing conditions comprises the steps of obtaining characteristic data indicating a relation between processed area and deposition rate corresponding to a current of the beam and adjustively increasing a number of repetitions of the beam scan by a value equal to the ratio (decrease in rate value)/(maximum rate value) in accordance with a decrease in the deposition rate.

6. (previously presented) A method of fabricating a three-dimensional microstructure as set forth in claim 1; wherein the data corresponding to the designed three-dimensional shape of the three-dimensional microstructure comprises CAD data; and wherein the forming step includes the steps of obtaining plural sets of data corresponding to plural two-dimensional shapes of the microstructure by differentiation and controlling a position scanned by the beam in accordance with the plural sets of data.

7. - 8. (canceled).

9. (previously presented) A method of fabricating a three-dimensional microstructure, comprising the steps of:

providing data corresponding to information relating to the structure of a three-dimensional microstructure design;

a first processing step of processing a sample in accordance with the provided data by irradiating the sample with a charged-particle beam while controlling processing conditions of the charged-particle beam;

comparing dimensions of the processed sample with the provided data to identify differences between the structure of the processed sample and the structure of the three-dimensional microstructure design; and

a second processing step of processing the sample by irradiating the sample with a charged-particle beam to correct the structural differences identified in the comparing step while adjusting the processing conditions of the charged-particle beam to thereby fabricate a three-dimensional microstructure having a structure substantially the same as the structure of the three-dimensional microstructure design.

10. (previously presented) A method according to claim 9; wherein the providing step comprises providing CAD data.

11. (previously presented) A method according to claim 9; wherein the processing conditions of the charged-particle beam comprise at least one of an accelerating voltage, current, scan rate, dot-to-dot interval, and dot duration of the charged-particle beam.

12. (previously presented) A method according to claim 9; wherein the providing step includes the step of differentiating the information relating to the structure of the three-dimensional microstructure design in a direction of an axis of the charged-particle beam to provide a plurality of sets of two-dimensional data; and wherein the first processing step comprises the step of processing the sample in accordance with the sets of two-dimensional data while controlling processing conditions of the charged-particle beam.

13. (previously presented) A method according to claim 12; wherein the processing conditions of the charged-particle beam comprise at least one of an accelerating voltage, current, scan rate, dot-to-dot interval, and dot duration of the charged-particle beam.

14. (previously presented) A method according to claim 9; wherein the charged- particle beam comprises a focused ion beam.

15. (previously presented) A method according to claim 9; wherein the information relating to the structure of the three-dimensional microstructure design comprises information relating to at least one of dimensions and a three-dimensional shape of the three-dimensional microstructure design.

16. - 20. (canceled).

21. (new) A method of fabricating a three-dimensional microstructure, comprising the steps of:

forming a prototypic structure in accordance with CAD data corresponding to a designed three-dimensional shape of the three-dimensional microstructure by scanning a sample with a beam produced by a charged-particle beam system while controlling processing conditions thereof;

comparing the shape of the formed prototypic structure with the designed three-dimensional shape of the three-dimensional microstructure to identify differences between the shape of the prototypic structure and the designed three-dimensional shape of the three-dimensional microstructure; and

processing the prototypic structure to correct the differences identified in the comparing step by scanning the prototypic structure with a beam produced by the charged-particle beam system while adjusting the processing conditions thereof to thereby fabricate a three-dimensional

microstructure having a shape corresponding substantially to the designed three-dimensional shape.

22. (new) A method of fabricating a three-dimensional microstructure as set forth in claim 21; wherein the processing conditions of the charged-particle beam system include accelerating voltage, beam current, scan rate, dot-to-dot interval, and dot duration.

23. (new) A method of fabricating a three-dimensional microstructure as set forth in claim 21; wherein the step of adjusting the processing conditions comprises the steps of obtaining characteristic data indicating a relation between processed area and deposition rate corresponding to a current of the beam and adjustably increasing the duration of the beam scans by a value corresponding to the ratio (decrease in rate value)/(maximum rate value) in accordance with a decrease in the deposition rate.

24. (new) A method of fabricating a three-dimensional microstructure as set forth in claim 21; wherein the step of adjusting the processing conditions comprises the steps of obtaining characteristic data corresponding to a relation between processed area and deposition rate for each value of a current of the beam, processing the prototypic structure by using a maximum rate region up to a kink portion of one of the beam current values, switching the beam current to a next greatest value in the kink portion and using the

maximum rate region up to a kink portion of the beam current with the next greatest value, and repeating the switching step until the differences obtained from the comparing step are corrected.

25. (new) A method of fabricating a three-dimensional microstructure as set forth in claim 21; wherein the step of adjusting the processing conditions comprises the steps of obtaining characteristic data indicating a relation between processed area and deposition rate corresponding to a current of the beam and adjustively increasing a number of repetitions of the beam scan by a value equal to the ratio (decrease in rate value)/(maximum rate value) in accordance with a decrease in the deposition rate.